

## ABSTRACT

A sub block generation circuit 52 divides  
coefficients of orthogonal transformation by  $8 \times 8$  to sub  
5 block data, and a two-dimensional reversible coding  
circuit 54 selects transformation table data for  
assigning an encoding code having a short bit length to  
non-0 coefficient quantity data indicating "0" in non-0  
coefficient quantity data "TotalCoeff" of a sub block  
10 being away from direct current components, and performs  
encoding.